

What is claimed is;

1. A pattern forming method which is characterized in comprising

[1] a step of applying on a substrate material a photosensitive composition comprising (a) an alkali-soluble resin, (b) a photosensitizer having a quinone diazide group, (c) a photo acid generator, (d) a crosslinking agent and (e) a solvent to form a photosensitive layer,

[2] a step of exposing the photosensitive layer to light through a mask,

[3] a step of removing said exposed area by development to form a positive image, and then

[4] a step of exposing a whole area of the positive image to light.

2. The pattern forming method which is characterized in that in the pattern forming method according to claim 1, (b) a photosensitizer having a quinone diazide group and (c) a photo acid generator have an absorption activity at the same exposure wavelength and the whole area exposure is conducted at the exposure wavelength where both the photosensitizer and the photo-acid generator have an absorption activity.

3. A pattern forming method which is characterized in comprising

[1] a step of applying on a substrate material a photosensitive composition comprising (a) an alkali-soluble resin, (f) a compound having a quinone diazide group and functioning as a photosensitizer and a photo-acid generator, (d) a crosslinking agent and (e) a solvent to form a photosensitive layer,
[2] a step of exposing the photosensitive layer to light through a mask,
[3] a step of removing said exposed area of the photosensitive layer by development to form a positive image, and then
[4] a step of exposing a whole area of the positive image to light.

4. A pattern forming method according to any one of claims 1 to 3, which is characterized in that [5] a heat treatment (post-baking) is carried out after the whole area exposure step described before.

5. A pattern forming method according to any one of claims 1 to 4, which is characterized in that said alkali-soluble resin is at least one species selected from the group consisting of novolak resins, polyvinyl phenolic resins and acrylic resins.

6. A pattern forming method according to any one of claims 1 to 5, which is characterized in that the mask used at the exposure step described before is a mask having a half-tone region which is partially

made 10 to 90 % of transmittance at a light transmission region by being equipped with a semi-transparent film or installing a slit or a mesh having a dimension of not more than a resolution of the exposure device.